CANADA PACIFIC RAILWAY.

ELEMENTS FOR A PROSPECTUS.

The "Canada Pacific Railway" (1) presents the shortest line of route between Europe and Asia, whilst it passes over the most favorable ground in the world for a railroad. (2) The grades and curves are easier, the altitudes infinitely less, the climate more temperate than on any of the other routes across the American continent, and the line is nearly free from snow, thus enabling it to be worked with regularity, rapidity and economy. Timber, ballast, and water carriage in every direction furnish the greatest facilities of construction; coal is abundant both at the termini and along the road, and the country traversed offers a succession of fertile lands and water communication unrivalled in North America, and presenting such inducements to settlers as Canada has hitherto never had to offer. These will soon create a local or way traffic, which, added to that of the treasures from the East, the general through traffic, and the many other advantages of the route, will make the "Canada Pacific Railway" beyond a doubt the best paying line across the American Continent.

ESTIMATED EXPENSE.

The opinions of competent engineers vary in this respect concerning a line of such extent and through an unsettled country; but leaving aside English estimates, which are hardly applicable, and taking the cost of some of the best American lines as a fair basis, the following figures will be found sufficiently correct:

Total distance from the junction of the Mattawan and the Ottawa (the proposed starting point), to the summit of the Yellow Head Pass (limit of British Columbia), 2,062 miles, of which:

Level, or comparatively so,	1,447 miles	at	£7,000	£10,129,000
Rolling ground,	288 "	"	7,500	2,160,000
Hilly and rocky,	327 "	"	8,500	2,779,500
Telegraph,	2,062 "	"	50	103,100
				£15,171,600

In the above calculation the "uniform expenses," viz., clearing and draining, superstructure, stations, workmen's dwellings, rolling stock, engineering contingencies, and reserve fund, figure for £5,000 per mile, and the "variable expenses" or grading and bridging, for the remainder of the sum.

In British Columbia, the distance from the summit of the Yellow Head Pass to Waddington Harbour at the head of Bute Inlet, is 445 miles, of which:

152 miles comparatively level, at £7,000	£1,064,000
293 " hilly and rocky, at £8,500 (3)	2,490,500
Extra for the defile of the Homathco Valley	100,000
445 miles of telegraph at £50	22,250
Total for British Columbia (4)	3,676,750

(1) See "Sketch of the proposed line of overland railroad through British North America" by Alfred Waddington. London, Longmans & Co., 1869, for the details of the route.

(2) The plain of the Saskatchewan is generally a perfect level, without a mound or tree to vary the vast expanse of green sward—over which Sir George Simpson travelled 600 miles in 14 days with 50 horses and loaded carts, without any road.

(3) Any amount of Chinese labor can be procured on the Pacific coast at one dollar per day.

(4) It has been ascertained, that by constructing suspension railroad bridges over the three straits between the mainland and Stuart Island, Stuart and Valdes Islands, and Valdes and Vancouver Island, the railway can be eventually continued down the west side of Bute Inlet and across Vancouver Island, either to the head of Kyuquot Sound; or to Alberni Canal at the head of Barclay Sound; or to Esquimalt harbour near Victoria; thus avoiding the crossing of the Gulf of Georgia and all its inconveniences. But the expense would be enormous on account of the great length of the bridges, and the excessive ruggedness of a portion of the ground; say £3,500,000, £3,500,000 or £4,000,000, (of which £1,700,000 for the bridges,) for 195, 164, or 245 miles, to each of these harbours respectively. Such an undertaking must necessarily be deferred to a future day, though it points to the advisability of carrying the road to Bute Inlet apart from other weighty considerations.

Total for British Columbia, brought forward	£3,676,750
Portion east of the Rocky Mountains	15,171,600
Interest on capital expended during the first 2½ years, at 5 per cent	1,151,650
Total	£20,000,000

Of which the section between Neepigon Bay and Fort Garry (433 miles) would cost about three and a half millions.

ESTIMATED RETURNS.

THROUGH TRAFFIC.

The number of passengers per day at each terminus on the "Central Pacific" is about 100. We will suppose only 60 through passengers on the "Canada Pacific," or 30 each way, × 300 days, = 18,000 per annum. The price from Ottawa to San Francisco has lately been reduced to about $100, or £20. 18,000 passengers at £20 ..... £360,000

Goods,—50 tons per day each way, = 30,000 tons at 1½ cents per mile, on 2,507 miles to Bute Inlet, = £9 13 0, or say £8. (The price for 1,826 miles per "Central Pacific" was, till lately, $1 per cubic foot, or $34. That from New York to San Francisco by Cape Horn is about $12.) 30,000 tons at £8 240,000

Precious metals, £500,000 at ½ per cent 2,500

Besides this amount from the Cariboo gold mines, the exportation of bullion to China for tea, silk, spices, &c., varies from 25 to 35 million dollars annually, of which say one million sterling at ½ per cent 5,000

Carriage of mails, Canadian and Imperial 20,000

Do of small parcels and express matter 5,000

Telegraph despatches 10,000

LOCAL OR WAY TRAFFIC.

36,000 passengers per annum, or twice the number of through passengers, for an average distance of 400 miles, or one sixth, at £3 6 8 120,000

Good's traffic, consisting: 1st. Of lumber and fuel from the forests of the Winipeg, in return for the produce of the Fertile Belt, such as cattle, grain, &c., transported to Neepigon Bay. The entire trade of the North-West Territory, both settlers and Hudson's Bay Company, amounts at present to from three to four million dollars annually. 2nd. The trade between Ottawa and Lake Superior, by Neepigon Harbour, which is 70 miles nearer to Montreal by water than Chicago. There are 14 steamers engaged in the trade on Lake Superior, with a total capacity of 10,000 tons, besides 110 vessels of other descriptions. Coal and copper and iron ores are among the most frequent freights. 3rd. The trade both ways with the Cariboo gold mines. Total, say, 100 tons per day, or 30,000 tons annually, carried an average distance of 500 miles, at £1 12s 48,000

	810,500
Deduct 60 per cent. for working expenses	486,300
Net profit	£ 324,200

SALES OF LAND.

After the late events, which have rendered the Red River Settlement so notorious, the inauguration of the "Canada Pacific Railway" will immediately form a point of attraction to the whole population of Europe and Canada. Emigrants will flock to the spot, and speedily become interested as settlers in a work, in which they will find a means both to gain their bread and benefit their condition. Settle-

Carried forward £324,200

Brought forward.....	£324,200

ment and civilization will follow the road step by step, as fast as it advances, and its results acquire more and more importance, till it would be difficult to say what amount of population the opening up of such an extensive and fertile territory, aided by all these advantages, may attract;—at the end of a couple years, probably not less than ten or twelve thousand settlers annually. In the adjoining State of Minnesota, the population has increased, in the last eighteen years, from 5,000 to 500,000; and on the "Illinois Central," the sale of lands, which amounted to at least $35,000,000 (seven and a quarter millions sterling), more than paid the cost of the road, = $28,610,229, everything included. 6,000 settlers at 160 acres each, would make 960,000 acres, at an average price, including town lots, of $2 per acre, = $1,920,000, or £394,250, and after deducting surveying expenses..... 380,000

MINERALS.

On the north side of Lake Superior, at Neepigon Bay, close to which the proposed route passes, traces of valuable copper and silver ore are abundant, and are believed to extend through the hills that form the divide between that point and Winipeg river. In the plain of the Saskatchewan, beds of coal crop out on the projected line of road, near the Touchwood Hills, 400 miles west of Fort Garry, and again 400 miles further west, near Long Lake, in Long. 113°. These will become invaluable, both for the use of the railroad and of the future inhabitants of the plain, where wood is scarce. In British Columbia, the road traverses the celebrated Bald Mountains, which are known to be rich in gold, silver, copper and lead ores; and here the construction of the railway will no doubt lead to important discoveries.....*pro mem.*

Net return.....	£704,200

or 3½ per cent. interest on a capital of £20,000,000.

It must not be forgotten, however, that the above figures are only supposed to apply to the first year or two after the opening of the road; and that the traffic, as well as the price of land, will rapidly increase, and that in an enormous ratio, with the development of the country.

ALFRED WADDINGTON.

OTTAWA, 22nd August, 1870.